

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0120464; AI 85192; PER20020001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Mo-Dad Utilities, LLC
Crestwood & Richmond Place Subdivisions
P.O. Box 790
Denham Springs, LA 70727
- II. **PREPARED BY:** Ronda Burtch
- DATE PREPARED:** November 28, 2006
- III. **PERMIT ACTION:** reissue LPDES permit LA0120464, AI 85192; PER20020001
- LPDES application received: November 22, 2002
- LPDES permit LAG570191 issued: February 21, 2002
LPDES permit LAG570191 expired: September 30, 2002
- Please note that upon issuance, the LPDES permit LA0120464 shall replace the previously issued State (LPDES) permit LAG570191.
- IV. **FACILITY INFORMATION:**
- A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment works serving the Crestwood & Richmond Place Subdivisions.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located at 35605 Melrose Avenue in Denham Springs, Livingston Parish.
- D. The treatment facility consists of four-50,000 GPD extended aeration treatment plants. Disinfection is by chlorination.
- E. **Outfall 001**
- Discharge Location: Latitude 30° 34' 57" North
Longitude 90° 55' 59" West
- Description: treated sanitary wastewater
- Expected Flow: 521 homes x 400 gallons/day/home = 0.2084 MGD
- Calculations for gallons per day were based upon figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.
- Please note that if the facility grows to a discharge beyond the design capacity of the facility, additional sewage treatment may be required with prior approval of the facility's plans by the Louisiana Department of Health and Hospitals and notification must be submitted to the LDEQ. Also, if the expected flow reaches or exceeds the design capacity of the facility, a permit modification may be required.**

Type of Flow Measurement which the facility is currently using:

Bucket and Stop Watch **A condition of the permit is that the flow from the facility be measured continuously. Therefore, a continuous recorder will be required at this facility.**

V. RECEIVING WATERS:

The discharge is into an unnamed ditch, thence into Beaver Creek, thence into the Amite River in segment 040302 of the Lake Pontchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 040302 of the Lake Pontchartrain Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 040302	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Not Supported	Full	Full	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 040302 of the Lake Pontchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040302 of the Lake Pontchartrain Basin, has been identified by the U. S. Fish and Wildlife Service (FWLS) as habitat for the Alabama (Inflated) Heelsplitter, Gulf Sturgeon, and the West Indian Manatee, which are listed federally as a threatened species. However, this type of discharge is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on

the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Ronda Burtch
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 040302, Amite River - La. Hwy. 37 to Amite River Diversion Canal, is listed on LDEQ's Final 2004 303(d) List as impaired for pathogen indicators (Total Fecal Coliform). To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Pathogen Indicators (Total Fecal Coliform)

To protect the receiving waterbody against high levels of pathogenic organisms, fecal coliform limitations have been established in the permit.

Interim 1 Effluent Limits:

OUTFALL 001

Interim 1 Effluent Limits are included in order to give the permittee sufficient time to upgrade to a continuous recorder device to monitor flow and to meet mass and ammonia limitations for the first time. Interim 1 Effluent Limits shall become effective on the effective date of the permit and expire one (1) year from the effective date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	Report	10 mg/l	15 mg/l	Limits are set in accordance with the Lake Pontchartrain Basin Segment 0403 Areawide Policy for facilities of this treatment type and size.
TSS	Report	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	Report	Report	Report	Limits are set in accordance with the Lake Pontchartrain Basin Segment 0403 Areawide Policy for facilities of this treatment type and size.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Final Effluent Limits:

OUTFALL 001

Final limits shall become effective one (1) year from the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	17	10 mg/l	15 mg/l	Limits are set in accordance with the Lake Pontchartrain Basin Segment 0403 Areawide Policy for facilities of this treatment type and size.
TSS	26	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	9	5 mg/l	10 mg/l	Limits are set in accordance with the Lake Pontchartrain Basin Segment 0403 Areawide Policy for facilities of this treatment type and size.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

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The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LAG570191: Issued: February 21, 2002
Expired: September 30, 2002

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	N/A	Report	1/month	Measure
BOD ₅	10 mg/l	15 mg/l	1/month	Grab
TSS	15 mg/l	23 mg/l	1/month	Grab
Fecal Coliform Colonies	200	400	1/month	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following inspections were performed during the period beginning October 25, 2004 and ending October 25, 2006 for this facility.

Date: June 9, 2005

Inspector: LDEQ

Findings and/or Violations:

1. Permit LAG570191 expired October 1, 2002. Operates under Class IV permit, discharging less than 100,000 gallons per day. Mo-Dad filed a Notice of Intent (NOI) on November 21, 2002.
2. Facility is a concrete-grounded mechanical sewer treatment plant that was in operation at the time of inspection.
3. The aerators, sludge returns, and 4 blowers were operational. Skimmers were not operational though. Certain sections had massive build-up of sludge and solids.
4. There was trash in the middle section of plant and a little trash seen in weirs.
5. Flock is seen throughout STP.
6. There appeared to be a certain substance that appeared to be caked on to some of the grating. A ladder was present as well as a work bucket, so apparently there must be some maintenance or construction work taking place.
7. Facility uses 16 chlorine contact chambers, 15 have tablets and 14 have individual covers.
8. Lift station on site adjacent to STP. Could not be opened; grating shut.
9. Receiving waters surrounded by vegetation and appeared clear. No smell, no oily sheen, no solids present.
10. The discharge pipe appeared normal and very sturdy. No evidence of tampering, no cracks seen.
11. Discharge present. Clear and nice flow. BOD and TSS samples taken at 1046 hrs.
12. Facility is submitting DMRs to DEQ. There were over 40 excursions found from 4th Quarter 2002 to 1st Quarter 2005: 12 BOD excursions, 19 TSS excursions, 8 Flow excursions, 6 Fecal Coliform excursions.

Date: April 26, 2006

Inspector: LDEQ

Findings and/or Violations:

1. This STP is a very large treatment facility enclosed in wood a fence. This facility is a multi-aerator facility with two double chlorination chambers.
2. The facility appears to be working properly. The facility is unmanned.
3. There are no areas of concern at this time.

B) Compliance and/or Administrative Orders

A review of the files indicates that there are no recent enforcement actions administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning July 1, 2004 through June 30, 2006 has revealed the following violations:

Month	Parameter	DMR Reported Value	Permit Limit
July 2004	TSS, Monthly Avg.	32 mg/l	15 mg/l
	TSS, Weekly Avg.	32 mg/l	32 mg/l
August 2004	BOD ₅ , Monthly Avg.	69.6 mg/l	10 mg/l
	BOD ₅ , Weekly Avg.	69.6 mg/l	15 mg/l
	TSS, Monthly Avg.	21.6 mg/l	15 mg/l
	Fecal Coliform, Monthly Avg.	>2,000 col/100 ml	200 col/100 ml
	Fecal Coliform, Weekly Avg.	>2,000 col/100 ml	400 col/100 ml
September 2004	Fecal Coliform, Monthly Avg.	560 col/100 ml	200 col/100 ml
	Fecal Coliform, Weekly Avg.	560 col/100 ml	400 col/100 ml
November 2004	TSS, Monthly Avg.	22 mg/l	15 mg/l
February 2005	BOD ₅ , Monthly Avg.	10.6 mg/l	10 mg/l
	TSS, Monthly Avg.	18.4 mg/l	15 mg/l
March 2005	TSS, Monthly Avg.	15.6 mg/l	15 mg/l
June 2005	TSS, Monthly Avg.	51.5 mg/l	15 mg/l
	TSS, Weekly Avg.	56.7 mg/l	23 mg/l
July 2005	TSS, Monthly Avg.	35.9 mg/l	15 mg/l
	TSS, Weekly Avg.	35.9 mg/l	23 mg/l
August 2005	TSS, Monthly Avg.	51 mg/l	15 mg/l
	TSS, Weekly Avg.	51 mg/l	23 mg/l
September 2005	TSS, Monthly Avg.	72 mg/l	15 mg/l
	TSS, Weekly Avg.	113 mg/l	23 mg/l
October 2005	TSS, Monthly Avg.	82 mg/l	15 mg/l
	TSS, Weekly Avg.	82 mg/l	23 mg/l
November 2005	BOD ₅ , Monthly Avg.	21 mg/l	10 mg/l
	BOD ₅ , Weekly Avg.	21 mg/l	15 mg/l
	TSS, Monthly Avg.	168 mg/l	15 mg/l
	TSS, Weekly Avg.	168 mg/l	23 mg/l
December 2005	BOD ₅ , Monthly Avg.	52 mg/l	10 mg/l
	BOD ₅ , Weekly Avg.	79 mg/l	15 mg/l
	TSS, Monthly Avg.	105 mg/l	15 mg/l
	TSS, Weekly Avg.	152 mg/l	23 mg/l
	Fecal Coliform, Monthly Avg.	316 col/100 ml	200 col/100 ml
	Fecal Coliform, Weekly Avg.	890 col/100 ml	400 col/100 ml
January 2006	TSS, Monthly Avg.	32 mg/l	15 mg/l
	TSS, Weekly Avg.	32 mg/l	23 mg/l
February 2006	TSS, Monthly Avg.	29 mg/l	15 mg/l
	TSS, Weekly Avg.	29 mg/l	23 mg/l
April 2006	TSS, Monthly Avg.	18 mg/l	15 mg/l
May 2006	BOD ₅ , Monthly Avg.	30 mg/l	10 mg/l
	BOD ₅ , Weekly Avg.	30 mg/l	15 mg/l
	TSS, Monthly Avg.	114 mg/l	15 mg/l
	TSS, Weekly Avg.	114 mg/l	23 mg/l
	Fecal Coliform, Monthly Avg.	850 col/100 ml	200 col/100 ml
	Fecal Coliform, Weekly Avg.	850 col/100 ml	400 col/100 ml

June 2006	BOD ₅ , Weekly Avg.	16 mg/l	15 mg/l
	TSS, Monthly Avg.	84 mg/l	15 mg/l
	TSS, Weekly Avg.	68 mg/l	23 mg/l

XII. ADDITIONAL INFORMATION:

Please be aware that the Department will be conducting a TMDL in the Lake Pontchartrain Basin scheduled for completion in 2011. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.2084 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.2084 \text{ MGD} \times 10 \text{ mg/l} = 17 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows over 0.10 MGD in Subsegment 0403 of the Lake Pontchartrain Basin

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
CBOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

The permittee shall efficiently operate and maintain the existing treatment facility so as to discharge effluent which does not exceed the INTERIM EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS.

The permittee shall achieve compliance with the FINAL EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS as specified in accordance with the following schedule:

<u>ACTIVITY</u>	<u>DATE</u>
Achieve Interim 1 Effluent Limitations and Monitoring Requirements	Effective date of permit
Achieve Final Effluent Limitations and Monitoring Requirements	One (1) year from the effective date of the permit

The above listed activities must be achieved on or before the deadline date. Additionally, the permittee shall submit a progress report outlining the status of all facility improvements on a yearly basis until compliance is achieved.

Within 14 days of completion of the new facility or facility upgrade and/or expansion, the Permittee shall

notify the Department of Environmental Quality, Office of Environmental Services in writing that construction has been completed.

The Permittee shall achieve sustained compliance with Final Effluent Limitations.

Where the percent project completion reported is less than would be required to assure completion of necessary upgrades by the required date, the report of progress shall also include an explanation for this delay and proposed remedial actions.

No later than 14 days following a date for a specific action (as opposed to a report of progress), the permittee shall submit a written notice of compliance or noncompliance.

If Mo-Dad Utilities, LLC is unable to comply with the above issued Schedule of Compliance, the shall submit an alternative compliance schedule, for consideration by this Office, within the Draft Permit Public Notice Period.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Mo-Dad Utilities, LLC, Crestwood / Richmond Subdivisions, November 22, 2002.